



2016-2017 WORK PLAN

PURPOSE, OBJECTIVES, AND KEY ACCOMPLISHMENTS EXPECTED IN 2016-17

In 2010, the Stormwater Work Group (SWG) recommended a strategic scientific framework, priorities, and specific steps to implement a broad, comprehensive Stormwater Assessment and Monitoring Program for Puget Sound (SWAMPPS). The *2010 Strategy* is focused on enabling us to know whether or not our management actions are successfully reducing harm caused to Puget Sound by stormwater from developed and developing lands. In 2012 the Washington Dept. of Ecology (Ecology) issued municipal stormwater NPDES permits requiring collective implementation of a Regional Stormwater Monitoring Program (RSMP) – a prioritized subset of the *2010 Strategy*. This document is intended to guide the SWG's near-term role in implementing the *2010 Strategy*, overseeing the RSMP, and continuing to expand the monitoring program activities.

The SWG's areas of focus for 2016 and 2017 are:

1. Continue to implement the *2010 Strategy*, our October 2010 *Recommendations for Municipal Stormwater Permit Monitoring*, and subsequent formal recommendations submitted to Ecology.
 - a. Finalize marine nearshore sediment QAPP and conduct sampling in summer 2016,
 - b. Complete marine mussel sampling in winter 2016 and analysis in 2017,
 - c. Analyze and report on small streams monitoring data collected in 2015 and develop recommendations for the next round of sampling,
 - d. Oversee first round of ten RSMP effectiveness studies and implement a process for soliciting proposals and selecting a second round of studies,
 - e. Review findings of the analysis of permittees' Illicit Discharge Detection and Elimination (IDDE) tracking data and recommend specific next steps for both the Methods/Approaches and Results/Findings sides of the Source Identification Information Repository (SIDIR),
 - f. Approve recommendations for implementing regional monitoring of runoff from agricultural areas,
 - g. Get regular budget and progress reports from our Pooled Resources Oversight Committee (PRO-Committee) and provide Ecology with input needed to successfully implement the RSMP,
 - h. Make recommendations to Ecology for the Special Condition S8 Monitoring and Assessment requirements in the next municipal stormwater NPDES permit cycle, and
 - i. Make additional decisions and provide guidance needed to implement our recommendations successfully.
2. Communicate and coordinate with policy makers, monitoring groups and other interested parties in Puget Sound.
 - a. Update our communication strategy to share RSMP findings with stormwater managers, public works directors, permit managers, city managers, and local elected officials.
 - b. Send out SWG Reporter issues 5 times each calendar year following SWG meetings.
 - c. Develop an annual report following the close of the calendar years of 2015 and 2016.
 - d. Educate elected officials, city and county staff, legislators, agency directors and staff, and others (such as the Washington Waters Task Force) about our recommendations and findings. Participate in the Puget Sound Ecosystem Monitoring Program (PSEMP) as a topical workgroup and engage with the other workgroups.
 - e. Engage more interested parties in our subgroups.
 - f. Stay informed on the design approach and implementation of receiving water monitoring for the Lower Columbia River Basin



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3. Continue to discuss strategic expansions of the *2010 Strategy* to other water bodies, types of NPDES-permitted activities, land uses, or geographic areas of Puget Sound.
 - a. Advise PSEMP, PSP, Ecology, and others on stormwater-related monitoring activities conducted outside of the RSMP.
 - b. Hear from experts on implementation of our recommendations.
 - c. Hear from other topical workgroups at regular SWG meetings.
 - d. Review and set priorities for status and trends monitoring, effectiveness studies, source identification and diagnostic monitoring, and studies/research

This work plan lays out the proposed tasks that need to be completed, their timelines, and the roles and responsibilities of various parties in completing the work. This work plan is meant to be a starting point.

WORK PLAN TASKS

The following work plan tasks are proposed to be accomplished during 2016-2017:

- Task 1: Oversee Ecology's administration of the RSMP pooled resources account.
- Task 2: Communicate with stormwater managers, policy makers, and other interested parties.
- Task 3: Oversee implementation of RSMP small streams status and trends monitoring and assessment.
- Task 4: Oversee RSMP effectiveness studies and select additional effectiveness studies.
- Task 5: Oversee implementation of RSMP marine nearshore status and trends monitoring and assessment.
- Task 6: Recommend and implement priority components of the Source Identification Information Repository (SIDIR)
- Task 7: Develop recommendations for regional monitoring related to runoff from agricultural lands
- Task 8: Discuss, set priorities, and develop implementation plans for additional SWAMPSS activities and identify areas for updates to the *2010 Strategy*
- Task 9: Participate fully in PSEMP; communicate and coordinate with other regional monitoring groups
- Task 10: Support, manage, staff, and lead implementation of SWAMPSS

ADVISORY SUBGROUPS AND COMMITTEES

As of the date of this work plan adoption the SWG is coordinating with numerous groups that are advising and supporting our recommendations for RSMP and SWAMPSS. In the past we have formed and provided direction to numerous SWG Subgroups; established a formal committee to oversee the pooled resources funding account; and have members and staff participating in other PSEMP workgroups as needed to coordinate SWAMPSS implementation. We will continue to interact with all of the groups listed below. This work plan articulates what we expect to ask from them in the coming year or two.

Active SWG Subgroups with open membership and participation:

- Agricultural Runoff
- Communication
- Effectiveness
- Source Identification Information Repository (SIDIR)
- Work Plan

Committees with formally assigned stakeholder representation:

- Pooled Resources Oversight Committee (PRO-Committee)

PSEMP Workgroups officially commissioned by the Steering Committee and related to our work:

- Freshwater
- Marine Nearshore
- Marine Water Quality
- Toxics



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PROPOSED MEETING DATES

The SWG will meet five or six times per year depending upon the issues we need to discuss and decisions we need to make. All dates are Wednesdays, and all meetings begin at 9am and continue to noon or later as needed. We may occasionally extend the meeting time so work group members should have their calendars clear until 3pm. At least two weeks' notice will be given for an extended meeting time.

- In 2016: January 13, March 16, June 1, September 14, and November 9
- In 2017: January 18, March 15, June 7, September 13, and November 15

Advisory subgroup meeting dates will be scheduled as needed by subgroup chairs and SWG staff.

TASK 1: Oversee Ecology's administration of the RSMP pooled resources account

The SWG has a formally-established role in overseeing Ecology's service as the administrative entity for pooling NPDES municipal stormwater permittees' funds. The SWG approved an oversight committee charter in 2012 and in 2014 the Pooled Resources Oversight Committee (PRO-Committee, or PRO-C) was established.

Ecology's RSMP Coordinator is regularly briefing the PRO-Committee as to the status of implementing the RSMP, and particularly in making contracting decisions to conduct RSMP activities and in reviewing and approving deliverables. The PRO-C seeks additional recommendations from the SWG as necessary or helpful to support contracting decisions and RSMP implementation.

The PRO-Committee will provide Ecology and the SWG with feedback as to their overall assessment of Ecology's approach to implementing SWG recommendations.

The SWG may also evaluate and recommend other options for administering the funds for the subsequent permit as they become available, although this task is not envisioned to be conducted during the time period covered by this SWG work plan.

Advisory Subgroup: PRO-Committee

Timeline and Deliverables:

Ongoing	Ecology budget and progress reports to PRO-Committee PRO-Committee reports to SWG at work group meetings PRO_C advice on contracting decisions: scope, schedule, budget
By March 1, 2016	Assessment of Ecology's service as the RSMP administrative entity

TASK 2: Communicate with stormwater managers, policy makers and other interested parties

The SWG developed a communication plan for the 2010 Strategy and 2010 Recommendations for Municipal Stormwater Permit Monitoring. In this coming biennium we will develop a new communication plan to share the findings of RSMP activities. The plan will be targeted to these priority audiences: stormwater management program directors, public works directors, permit managers, city managers, and other elected officials. Strategies and channels for delivering key messages to these audiences will be articulated in the plan. Other target audiences will be addressed if capacity is available.

In coordination with the PRO-C, the RSMP Coordinator will compile content and develop key messages for an annual report each January for the previous calendar year. The subgroup will assist with formatting, editing, and "look and feel" of the annual report.

The "SWG Reporter" keeps a large audience apprised of our progress. It is emailed to between 500-600 individuals between work group meetings. Communication Subgroup members review each issue in



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advance of distribution. A new listserv will be created for delivering issues in 2016. All editions are archived on the SWG's webpage <http://www.ecy.wa.gov/programs/wq/psmonitoring/reporter.html>

The SWG has used caucuses to communicate our key decisions, and the reasons behind them, to staff members at a large number of organizations and entities across Puget Sound. To augment the communication and outreach that takes place through the caucuses represented by SWG members, the Communication Subgroup will develop and review draft presentation and briefing materials for multiple audiences. We will continue to update our "lessons learned" document.

Work group members are asked to alert SWG staff to outdated content and propose improvements to our web pages.

A workshop will likely be held in May 2016 as part of the process of identifying the next round of effectiveness studies. The Communication Subgroup will help the SWG identify needs for and plan future workshops to update interested parties and gather input on SWAMPPS implementation.

Advisory Subgroup: Communication, PRO-Committee, RSMP Coordinator

Timeline and Deliverables:

After each SWG meeting	SWG Reporter issued
	Web archives and current content updated
Early 2016	RSMP Annual Report
	Communication strategy for sharing RSMP findings
	Format for delivering summaries of the findings of studies
	Listserv for SWG Reporter distribution
Spring 2016	RSMP Effectiveness Studies workshop
Summer 2016	Possible IDDE/SIDIR workshop
Early 2017	RSMP Annual Report
As needed/TBD	Other workshops and briefings
	Update "Lessons Learned" document

TASK 3: Oversee implementation of RSMP small streams status and trends monitoring and assessment

The first round of RSMP stream monitoring was conducted in 2015. The highest priority for 2016-2017 is to complete data management, analysis, interpretation, and public reporting for this RSMP component that:

- Provides a summary of the status of stream indicators that tell the best story about stormwater, including relevant human and environmental explanatory factors,
- Connects our work to other monitoring efforts in Puget Sound, and
- Makes recommendations for future RSMP data collection efforts to assess trends, including:
 - What parameters to continue monitoring, and at what sites, frequency, and timing; and
 - Stream gauging locations and a stream gauging program design.
- Contribute relevant findings to the PSEMP Toxics Workgroup's synthesis report.

A group of scientists was convened in early 2015 and to develop a scope of work for the contract to implement the RSMP Streams QAPP addendum for completing the analysis and reporting of the RSMP data.

The PSEMP Toxics Workgroup is exploring the possibility of publishing a synthesis report for the period from 2010-2015. We should plan to contribute RSMP streams toxics data to this report.

Advisory Subgroups: PSEMP Freshwater and Toxics Workgroups

Timeline and Deliverables:



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Winter 2016	Collect ancillary data and begin preparation for data analysis
Late spring 2016	First analyses completed
June 2016	Briefings by lead scientists at SWG meeting
Summer 2016	Summary of sediment chemistry findings to PSEMP Toxics Workgroup
Summer 2016	Contribute to a PSEMP Toxics Workgroup synthesis report.
Fall 2016	All analyses completed and recommendations prepared
September 2016	Reports and preliminary recommendations delivered to Ecology and SWG
November 2016	Approve recommendations for the next round of RSMP streams monitoring
2017	Develop implementation plan for stream monitoring and gaging recommendations

TASK 4: Oversee RSMP effectiveness studies and select additional effectiveness studies

In 2014 the SWG went through a process to identify a first round of ten RSMP effectiveness studies that answer priority questions we recommended in 2013. The first four of these studies are underway, and all ten should be underway by early 2016. Another round of studies needs to be identified to utilize the funds that remain available in the RSMP pooled resources account. In fall 2015 the Effectiveness Subgroup proposed a process for selecting these studies that built on the experiences and feedback from the 2014 process. The new process will be implemented in the first half of 2016 and the studies are expected to begin in summer or fall 2016.

As the Washington Dept. of Transportation (WSDOT) completes their permit-required effectiveness studies, the SWG will task a subgroup with reviewing WSDOT's monitoring reports and advise the SWG as to more detailed and specific recommendations for future permit-required transportation-related effectiveness monitoring and means of sharing the studies' findings.

Advisory Subgroup: Effectiveness

Timeline and Deliverables:

Early 2016	Complete contracting for remaining first round RSMP Effectiveness Studies
Spring 2016	Select second round of RSMP studies
Summer 2016	Begin contracting for second round of RSMP Effectiveness Studies
Ongoing	Connect our effectiveness studies to broader work and other monitoring activities

TASK 5: Oversee implementation of RSMP marine nearshore status and trends monitoring and assessment

The first component of RSMP nearshore monitoring is contaminants in caged mussels in winter 2015-16; the Washington Dept. of Fish and Wildlife (WDFW) is leading that effort. Sediment chemistry sampling will take place in 2016 led by USGS. In lieu of bacteria monitoring an analysis of other programs' data will be conducted in 2016-2017.

In this work plan period the data collection and/or compilation for all three marine nearshore monitoring components will be completed, as well as the analysis, interpretation, and reporting on each component. This will enable the technical subgroups to bring recommendations for future RSMP marine nearshore trends monitoring to SWG before the next permit is issued.

The SWG should also provide and pursue ongoing opportunities to hear from experts on implementation of our recommendations.

Advisory Subgroups: PSEMP Toxics and Marine Water Quality Workgroups

Timeline and Deliverables: Specific plans for 2016-2017 include:

Winter 2016:	Complete mussel sampling
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Winter-spring 2016:	Finalize QAPP for sediment chemistry
2016:	Complete bacteria data compilation, analysis, and reporting
2017:	Complete mussel contamination data analysis, interpretation and reporting
Summer 2016:	Conduct sediment sampling
2017:	Finish sediment data analysis, interpretation and reporting
2017:	Recommendations for future RSMP marine nearshore trends monitoring

TASK 6: Recommend and implement priority components of the Source Identification Information Repository (SIDIR)

“Source Identification and Diagnostic Monitoring” was one of the 4 key strategic components of the Stormwater Assessment and Monitoring Program for Puget Sound recommended by the SWG in 2010 (the others being status and trends, effectiveness studies, and research). Permittees with more developed IDDE programs wanted to have a way to help smaller, connected MS4s successfully implement their IDDE programs. Other stakeholders wanted to know what the most common problems were, to see if the region could help permittees address those issues.

In February 2012 the SWG approved a scoping memo that defined the Source Identification Information Repository (SIDIR) as having two main components: Methods and Approaches (an online library that is kept up to date), and Results and Findings (a permittee-populated database that is periodically analyzed). The memo also envisions a peer network for sharing information.

A [January 2013 report](#) with further recommendations provides a useful starting point for creating the methods library in a way that will be most useful to field staff. The Field Screening Manual developed by King County/Herrera could be a key entry in the methods library and a helpful starting point for identifying new guidance documents that need to be included or developed. Case studies should be included in the library, most appropriately housed on the Ecology webpage as a permittee resource. Other existing and evolving resources will continue to be reviewed and considered as well.

Permittees’ program implementation will continue to evolve. The subgroup will make recommendations to the SWG, providing a foundation for the implementation of SIDIR.

The current NPDES permits include a requirement that permittees submit key information for each Illicit Discharge Detection and Elimination (IDDE) incident with their annual reports. A consultant reviewed all of the incident tracking reporting data for 2014 is compiling it for subsequent analysis under the subgroup’s direction.

Further next steps on the Results/Findings side of SIDIR will be determined after the information is evaluated, in winter 2015-16. The RSMP may also survey permittees about where they are focusing their IDDE efforts. The annual report data and the survey results may be used to design a “sprint” type workshop to get folks together to brainstorm: What would help you? What has worked?

Advisory Subgroup: Source Identification/SIDIR

Timeline and Deliverables:

Winter 2015-16	Subgroup hears findings of the compilation and analysis of the info provided in the permittees’ annual reports
Spring 2016	Possible survey of permittees’ top 3 problems
Summer 2016	Possible workshop, built on results of IDDE incident tracking analysis, to develop recommendations for building SIDIR
2016	Final report presented to SWG

TASK 7: Approve recommendations for regional monitoring related to runoff from agricultural lands



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Stormwater runoff from agricultural lands is partly addressed by the prior recommendations of the work group, but new recommendations are needed to address agricultural runoff issues in a broader, more comprehensive way. The SWG commissioned a subgroup in early 2011 to propose expanding the *2010 Strategy* and building upon the *Recommendations for Municipal Stormwater Permit Monitoring* and other efforts to address agricultural issues. This subgroup is supported by Washington State Conservation Commission staff. The subgroup assembled several interim packages of recommendations which the SWG discussed and approved in 2011-2014. The next step is to piece them together into a final implementation and funding plan. The subgroup will develop an implementation plan including collective recommendations for monitoring agricultural runoff.

Advisory Subgroup: Agricultural Runoff

Timeline and Deliverables:

Winter 2015-16	Combined scientific framework, implementation plan, and funding approach
Fall 2016	Recommendations to PSP, WCCC, WSDA, and Ecology
2017	Implement agricultural runoff strategy

TASK 8: Discuss, set priorities, and develop implementation plans for additional SWAMPPS activities and identify areas for updates to the *2010 Strategy*

The *2010 Strategy* described a comprehensive regional framework and set priorities for early implementation. The October 2010 *Recommendations for Municipal Stormwater Permit Monitoring* further narrowed down monitoring activities to implement in Puget Sound. In the scientific framework and in our communications to others, we have emphasized the need to expand this framework and priorities to other water bodies (*i.e.*, lakes, groundwater, wetlands, open marine, rivers), land uses (*i.e.*, industrial, forested), permit types (*i.e.*, WSDOT, industrial, construction), combined sewers, and geographic areas in Puget Sound.

It is most important to successfully implement our 2010 recommendations in advance of expanding program implementation, but parallel processes can be launched using additional capacity and by recommending specific next steps including funding and implementation strategies to PSP and Ecology.

Other permits, combined sewers, additional water bodies, and parameters are all possible expansions of the *2010 Strategy*. Resetting priorities and cutting back on parameters, media, or monitoring components are also appropriate focuses of updates. The SWG will invite interested parties to champion their issues. The SWG will consider what topics are being addressed by other PSEMP work groups and discuss how we can best support those efforts to expand SWAMPPS and build on the RSMP.

Later in this work plan period, the SWG will begin considering what areas of the *2010 Strategy* need to be updated in light of what we've learned about stormwater management, monitoring program implementation, and other developments since 2010. This is in preparation for a 2020 update to the overall SWAMPPS strategy:

- Revisit our *2010 Strategy*:
 - Investigate our role in and capacity to be involved in and understand other stormwater monitoring and research activities in the context of each component of the RSMP, and
 - Discuss what priorities envisioned in the *2010 Strategy* are/are not being implemented and consider what new initiatives we should undertake, and
 - Determine what updates to the *2010 Strategy* should be considered for a 2020 update.

Advisory Subgroup: Work Plan, PSEMP staff, and interested work group members

Timeline and Deliverables:

March 2016	Recommendations for S8 in the 2018 municipal permits
July 2016	Updated description of implementation of SWAMPPS strategy
2016-2017	Discussion of adjustments to SWAMPPS priorities



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Summer 2017

Priorities for SWAMPPS expansion and 2010 Strategy updates

TASK 9: Participate fully in PSEMP; communicate and coordinate with other regional monitoring groups

The SWG is one of many topical work groups that have been formally commissioned by the Steering Committee for the Puget Sound Ecosystem Monitoring Program (PSEMP). The SWG staff deliver occasional briefings to the PSEMP steering committee. In early 2012, the SWG designated an official spokesperson to deliver briefings to the steering committee in addition to the chair and staff; the selected liaison retired in summer 2015 and the role has not been assigned to another steering committee member.

The SWG chair, members, and staff continue to coordinate with the PSEMP workgroups and other technical groups. All PSEMP workgroups are expected to provide each other with opportunities to contribute to work in our areas of overlap.

The SWG will continue to coordinate with other work groups, particularly freshwater, toxics, salmon habitat, and marine waters as those groups develop new recommendations. The SWG will continue to develop, improve, and expand our regional stormwater monitoring strategy and gather support. We will:

- Improve coordination and effectiveness of current monitoring efforts
- Make recommendations for improving data-sharing
- Hear regular updates about the work and decisions of the PSEMP Steering Committee
- Stay apprised of related work by other PSEMP workgroups
- Keep other PSEMP workgroups apprised of our work and findings
- Hear regular updates from the APWA stormwater coordination meetings on discussions related to our work

Advisory Subgroups: Rely on chair, vice chair, staff, and official delegates and alternates as liaisons to PSEMP Steering Committee and other workgroups.

Timeline and Deliverables:

Ongoing and/or standing agenda items for regular SWG meetings:

- Presentations and briefing materials
- Participation in PSEMP as a topical work group
- Exchange of information with related work groups
- Regular updates from Steering Committee

TASK 10: Support, manage, staff, and lead implementation of SWAMPPS

A broad, diverse membership has been used since 2008 to engage regional stakeholders in the process of developing a regional stormwater monitoring program. The SWG will continue to use their perspectives to implement SWAMPPS and demonstrate its success as a functional, meaningful, and cost-effective regional program. Ecology has assigned staff to support the work group and hired an RSMP Coordinator. Participating entities and caucuses also provide support, expertise, and services.

A chair and vice chair for two year terms will be nominated in January and selected in March of odd-numbered years. The chair executes the duties described in the SWG's bylaws.

Biennial work plan updates will be discussed in November and officially adopted by the SWG in January of each year. The SWG will continue to evaluate its progress and adapt the work plans as needed.

To implement this work plan, and full set of the SWG's October 2010 recommendations, the SWG staff and members will pursue opportunities for additional funding and resources to implement SWAMPPS.



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Specifically, the SWG will continue to develop, improve, and expand our regional stormwater monitoring strategy and gather support by:

- Improving coordination and effectiveness of current monitoring efforts, and
- Setting priority topic areas for additional work group effort or incremental improvements.

Advisory Subgroup: Work Plan, and chairs/staff of all other SWG advisory subgroups
SWG, RSMP, and PSEMP staff to coordinate and assist as needed

Timeline and Deliverables:

Ongoing	Pursue funding/leveraging opportunities as they become known/available
January 2016	2016-17 Work Plan adopted
Fall 2016	Annual update of two-year work plan
January 2017	Nominate SWG Chair and Vice Chair
	2017-18 Work Plan adopted
March 2017	SWG Chair and Vice Chair selected for two year terms
Fall 2017	Annual update of two-year work plan